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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,520	12/05/2003	Roy Hirst	MS305473.1/MSFTP491US	2369
27195 7590 05/11/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER RADTKE, MARK A	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 05/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/729,520	HIRST, ROY	
	<b>Examiner</b>	<b>Art Unit</b>	
	Mark A. X Radtke	2165	

All participants (applicant, applicant's representative, PTO personnel):

(1) Mark A. X Radtke.

(3) Ron Krosky (Applicant's Representative).

(2) Jeffrey Gaffin (SPE).

(4) Evan Perry (Applicant's Technical Specialist).

Date of Interview: 08 May 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1, 7 and 16.

Identification of prior art discussed: Sadahiro (USPN 6,237,136).

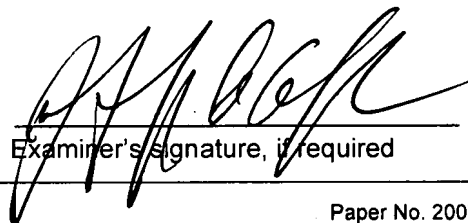
Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Applicant presented proposed amendment to overcome the claim objections (see attached). The proposed claims overcame the objections. Mr. Perry discussed the differences between Applicant's invention and Sadahiro. Mr. Perry noted that Sadahiro is directed towards source code conversion and not technical documentation as the term is used in the instant specification. Examiner asserted his position that source code, particularly comments within the source code, can be considered "technical documentation". Furthermore, Sadahiro anticipates the use of "Help files", another type of technical documentation. Examiner suggested amending the claims to narrow the scope of "technical documentation".

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**FACSIMILE TRANSMISSION**

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**Date:** April 20, 2007  
**TO:** Mark A. Radtke – United States Patent and Trademark Office  
**FAX NO.:** 571-273-7163  
**FROM:** David Noonan and Evan Perry

In re patent application of:

Applicant(s): Roy Hirst

Serial No: 10/729,520

Filing Date: December 5, 2003

Examiner: Mark A. Radtke

Art Unit: 2165

**Title:** SYSTEMS AND METHODS FOR IMPROVING INFORMATION  
DISCOVERY

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TOTAL NUMBER OF PAGES (INCLUDING THIS PAGE): 8

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Dear Examiner Radtke:

As discussed on the telephone, we are requesting an interview for the above captioned application. The following agenda is provided to indicate the proposed topics of discussion.

- I. Discussion of Rejection of Claims under 35 U.S.C. §102(b) and 103(a)
  - a. Discuss independent claims 1, 23, 24, 32 and 33
  - b. Discuss deficiencies of the cited references vis a vis the subject claims
    1. Sadahiro relates to source code generation from a code description file (pseudo-code)
    2. The subject claims relate to technical documentation search and retrieval

Attached, please find proposed claim amendments with respect to the above-referenced matter. Thanks again for your time and consideration.

Best regards,

-David and Evan

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**PROPOSED AMENDMENTS**

1. (Previously Presented) A system that facilitates finding documentation, comprising:
  - a query component that receives a request for technical documentation, the request comprising terminology of a first vocabulary corresponding to a first programming language;
  - a mapping component that correlates terminology of the first vocabulary to semantically equivalent terminology of a second vocabulary related to a second programming language; and
  - a discovery component that retrieves technical documentation based upon the terminology of the second vocabulary that is semantically equivalent to the terminology of the first vocabulary employed in the request.
2. (Previously Presented) The system of claim 1, the query component receives user input as a request for information, the request including at least one of text input, voice encoded input, video camera input, and audio input.
3. (Previously presented) The system of claim 2, the request for information is in the form of a natural language or syntax that is familiar to the user including terms and expressions that have been employed over time by the user.
4. (Previously Presented) The system of claim 2, the user input is processed by a parser into functional objects relating to information components that are processed to facilitate desired information retrieval.
5. (Cancelled)
6. (Previously Presented) The system of claim 1, the mapping component includes rules or models that map or analogize a first set of terms with a second set of terms.

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7. (Currently amended) The system of claim 4, the functional objects are employed by the mapping component to build or create search terms or queries that are ~~can be~~ applied to a remote or local database.
8. (Previously Presented) The system of claim 1, the mapping component further comprises at least one of a rule, a learning algorithm, an automated classification method, an inference model, a probability model, a statistical model, a neural network, a Support Vector Machine (SVM), a Naive Bayes model, a Bayes network, a decision tree, a similarity-based model, a vector-based model, and a Hidden Markov Model.
9. (Previously Presented) The system of claim 4, the functional objects are associated with a decision-theoretic analysis that includes analyzing extrinsic evidence or data of a user's present context state, and directing information in accordance with the data.
10. (Original) The system of claim 9, the evidence includes at least one of keyboard activities, mouse movements, microphone inputs, camera inputs, time information, and electronic calendar information.
11. (Previously Presented) The system of claim 1, the discovery component includes at least one of an automated search engine, an indexing engine, and a structured query language engine for retrieving information from a database.
12. (Previously Presented) The system of claim 1, the mapping component further comprising at least one of a technical vocabulary object, a development vocabulary object, a synonym object, an index object, and a prioritization object to facilitate retrieval of information.
13. (Previously Presented) The system of claim 1, the discovery component further comprising an instrumentation component to determine an importance value for a retrieved technical document.



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14. (Original) The system of claim 13, the instrumentation component tracks and maps successful and unsuccessful attempts to discover and interpret technology-specific and programming-language-specific functionality employing a natural or professional language.
15. (Original) The system of claim 13, further comprising a database for search attempts that indicates a technical value for selected technical information within a documentation set or other data structure residing in the database.
16. (Currently amended) The system of claim 13, the instrumentation component monitors at least one of visible technical documentation, search engine activity, ad and network traffic activity.
17. (Original) The system of claim 16, the instrumentation component monitors at least one of a counter, a type of word or phrase employed in a search, an implied or inferred measurement of data activity and an explicit request from users regarding a data source's technical value, ranking or merit.
18. (Previously Presented) The system of claim 17, further comprising a graphical user interface to determine a value for a technical document.
19. (Previously Presented) The system of claim 18, the user interface includes at least one of a ratings scale, a feedback component to allow users to determine what others thought of the technical document, and an input box to enable users to submit feedback as to why they ranked a particular technical document in the manner that was selected.
20. (Previously Presented) The system of claim 1, further comprising a graphical user interface to depict a cross reference of terminology of the first vocabulary with terminology of the second vocabulary.

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21. (Previously Presented) The system of claim 20, the cross reference includes at least one of a table of terminology of the first vocabulary displayed with a table of terminology of the second vocabulary, a single table showing cross-functional relationships including arrows or other indicators depicting relationships between terminology, a modular or graphical output including a block diagram in terminology of the first vocabulary that highlights or points to a corresponding block diagram of terminology of the second vocabulary, a system drawing to show one component's relationship to the system in terminology of the first vocabulary while also illustrating, fading, superimposing, or highlighting a related term on the system drawing to detail a relationship between terminology of the second vocabulary, and contrast blocks or diagrams that are displayed detailing differences with conventional terminology or design practices.

22. (Previously Presented) A computer readable medium having computer readable instructions stored thereon for implementing the query component, the mapping component, and the discovery component of claim 1.

23. (Currently amended) A computer-based information retrieval system, comprising:  
means for creating an object associated with developer terms or phrases learned from past user searching patterns;  
means for correlating the object with alternative terms or phrases;  
means for retrieving technical documentation with functional information equivalent to the developer terms and phrases in accordance with the alternative terms or phrases.

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24. (Currently amended) A method to facilitate automated information retrieval, comprising:
- automatically generating a first object set as a function of monitored programmer behavior, the first object set associated with a primary development environment;
  - automatically comparing the first object set to a second object set associated with a different development environment; and
  - automatically searching for functionally equivalent information technical documentation based at least in part on determined differences between the first object set and the second object set.
25. (Cancelled)
26. (Previously presented) The method of claim 24, further comprising:
- receiving a developer's request for functionally equivalent information; and
  - processing the request.
27. (Previously presented) The method of claim 26, further comprising automatically deriving the functionally equivalent information from the second object set.
28. (Original) The method of claim 24, further comprising at least one of:
- receiving feedback from a developer; and
  - generating a cross-index of familiar terms and unfamiliar terms to the developer.
29. (Previously presented) The method of claim 24, the first object set further comprising at least one of a technical vocabulary object, a development vocabulary object, a synonym object, an index object, and a prioritization object.
30. (Previously presented) The method of claim 24, further comprising automatically ranking the functionally equivalent information.
31. (Cancelled)

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32. (Currently amended) A computer readable medium having a data structure stored thereon, the data structure comprising:

- at least one object field indicating one or more developer terms derived from monitoring and learning user past activity;
- at least one synonym field associated with a second set of developer terms; and
- at least one mapping field to correlate the object field and the synonym field to facilitate retrieval of technical documentation including functionally equivalent information.

33. (Previously presented) A computer implemented method for finding technical documentation, the method comprising:

- receiving a first query string from a user, the query string comprising terminology of a first vocabulary corresponding to a first programming language;
- mapping the first vocabulary to a second vocabulary that corresponds to a second programming language;
- generating a second query string in terminology of the second vocabulary by employing the second vocabulary and the first query string, the second query string semantically corresponds to the first query string;
- searching a document set for documentation relevant to the second query; and
- providing documentation found by the search to the user

34. (Previously presented) The method of claim 33, further comprising allowing users to interactively input relevancies of search results and utilizing the relevancies to perform further searches.